



## **A civil engineer's recommendations for occupying and renovating existing space**

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What are some things to consider from a civil engineering perspective before renovating existing commercial space?

Borders and The Great Atlantic and Pacific Tea Company joined Linens 'n Things, Circuit City and the long list of retailers vacating stores. To cut costs, even commercial offices and municipal agencies have moved out in search of smaller space.

Given the high vacancy rates of existing commercial space in the New York metro area, the most cost effective means of developing is, often, redeveloping. With the growing selection of vacated space, it is becoming more common for tenants to renovate a previously occupied space than to develop a new site from the ground up.

When determining an existing space's compatibility with a new user, there are certain criteria to evaluate from a civil engineering perspective. In many cases, retaining a civil engineer to speak with municipalities early on enables a tenant to better identify the required modifications or upgrades. Consulting engineers like Bohler Engineering can also assist tenants in navigating the permitting process for building alterations and site improvements.

In order to identify the best site for a tenant's use, we recommend considering the following:

### Zoning Research

Conduct a comprehensive zoning analysis to verify if a change of use permit is required. Understanding the current zoning ahead of time avoids surprises. The zoning code can potentially trigger site improvements including landscape, stormwater management and parking facility upgrades. High occupancy uses have greater parking requirements.

### Utilities

Another aspect to take into account is existing utilities. If the new occupant's utility demands differ from the previous occupant's, changes could be required. It may be necessary to modify or upgrade existing utility systems for water, electric and gas. New occupants should consider things like age of utility systems, location of utilities based on proposed floor plan and municipal requirements like sprinkler systems.

### Sanitary System

Some sites may have the benefit of disposing sanitary waste into an offsite municipal sewer system. Other sites may have onsite sanitary waste systems such as septic systems. Depending on the proposed use and age of the existing septic system, modifications may be needed. An investigation should be performed to obtain the sanitary density of the site.

### Traffic Layout

Right of way improvements is another thing to consider. When renovating an existing site, Department of Transportation evaluates the site as it would a new development, especially if the use

changes. If the site is located on a state or county road, the NYS or county DOT assesses the ingress and egress points. The number of curb cuts is determined by the tenant's use. Typically, most municipalities prefer a cross access traffic design.

#### Permits

Even with smaller alterations, tenants can't avoid the daunting permitting process. Having a better understanding of the required permits will significantly improve the accuracy of a renovation project timeline. The range of permits and approval times will vary depending on the renovation scope of work. Typical permits include change of use and alteration permits. In both instances, plans are submitted to the building department.

If modifying existing signage, a sign permit is required. Sign restrictions with regard to height, placement and lighting are determined by the municipality.

#### Additional Items

Municipalities will require ADA compliance for any proposed modifications. The amount of ADA upgrades required will be based on the total cost of construction. Typical ADA modifications consist of sidewalk repair, curb ramp additions, asphalt grade modification, signage and handicap striping/markings.

Other site improvements to consider are aesthetic features such as site lighting and landscape architecture.

When assessing an existing site for compatibility, take these civil engineering issues into consideration. Often, while these features may not be required by regulatory agencies, site modifications and improvements can sustain and further enhance the longevity of a tenant's lease.

Consulting firms like Bohler Engineering provide the technical expertise and permitting experience to assist tenants in occupying existing space while continuing to operate at their highest efficiencies. By understanding key issues that affect redevelopment, our firm ensures that prospective tenants are proactive in identifying potential obstacles and delays. In turn, tenants can better meet their time and budgetary goals.

Bohler Engineering is a civil and consulting engineering firm that routinely assists clients in navigating the site development, interior alteration and permitting process of renovation projects. With thirteen offices along the Eastern United States, Bohler Engineering is the leading provider of land development services from due diligence through project completion.

Joseph Deal, PE is branch manager of Bohler Engineering, Ronkonkoma, N.Y.

New York Real Estate Journal - 17 Accord Park Drive #207, Norwell MA 02061 - (781) 878-4540